

***Leleuporella sexangulata* sp. n. from Sri Lanka, a *Leleuporella* species outside the Ethiopian realm (Coleoptera, Carabidae)**

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***Leleuporella sexangulata* sp. n. from Sri Lanka, a *Leleuporella* species outside the Ethiopian realm (Coleoptera, Carabidae).** - *Leleuporella sexangulata* sp. n. from Sri Lanka is described and illustrated. It is the first species of the genus described outside the Ethiopian region. A key is given to the known *Leleuporella* species.

**Key-words:** Coleoptera - Carabidae - Scaritinae - *Leleuporella* - taxonomy - Sri Lanka.

INTRODUCTION

The genus *Leleuporella* Basilewsky belongs to the tribe Clivinini (Scaritinae) and consists of small species of 2-3 mm length. The first species described was named as *Trilophus mandibularis* Burgeon (1935). Basilewsky erected a separate genus, *Leleuporella*, when he described *L. cacea* Basilewsky (1956). JEANNEL (1957) recognized that the two species belong to the same genus and this was confirmed and summarized by BASILEWSKY (1959). Both species occur in the western part of Africa at the equator in the same area, but are ecologically separated: *L. mandibularis* possesses hemisphaerically protruding eyes and was often collected in the forest in light traps whereas in *L. cacea* has completely reduced eyes and the species was washed out of sand and gravel at the border of a river near the Tumba See.

Among material collected by staff of the Muséum d'histoire naturelle Geneva in Sri Lanka, there were two specimens which do not belong to any of the genera known from the Oriental realm. Comparison with the type and other material of *Leleuporella mandibularis* and *L. cacea* exhibit two results: the two specimens belong to the genus *Leleuporella*, and are different in many characters from the known African species. Thus, *Leleuporella* occurs outside the Ethiopian realm.

Terms and descriptions of characters are based on BALKENOHL (1996).

Material is deposited in following collections:

MHNG: Muséum d'histoire naturelle (Genève, Switzerland)

MRAC: Musée Royal de l'Afrique Centrale, Tervuren, Belgique;

CBA: Collection of author (Denzlingen near Freiburg, Germany)

KEY TO THE SPECIES OF THE GENUS *Leleuporella*

- 1 Without eyes; genae conspicuously tumid; frons smooth, with indistinct puncture-like median impression. Outline of pronotum rounded laterally. Sides of elytra subseriate. Length 2.7 - 3.0 mm . . . . . *L. caeca* Basil
- With distinct eyes; genae inconspicuous; frons with furrows or carinae. Outline of pronotum straight laterally. Sides of elytra smooth . . . . . 2
- 2 Eyes big, hemisphaerically protruding; genae hardly visible. Frons with longitudinal furrow at middle and indistinct foveae at each side at neck constriction. Anterior margin of pronotum slightly convex; reflexed lateral border ending behind anterior setigerous puncture, extended to basal constriction as a submarginal furrow without marginal channel. Base of elytra truncated convex. Length 2.1 - 2.4 mm . *L. mandibularis* Burg
- Eyes smaller, reduced; genae distinct, rounding eyes in posterior quarter. Frons with about 6 irregular carinae. Anterior margin of pronotum concave, reflexed lateral border and marginal channel reaching nearly up to basal constriction. Base of elytra truncated rectangularly. Length 2.5 - 2.7 mm . . . . . *L. sexangulata* sp. n.

***Leleuporella sexangulata* sp. n.**

(Figs 1-3)

Type material: Holotype ♂, Ceylan, Southern, Yala Nat. Park, 24.1.1970, leg. I. Löbl, C. Besuchet, R. Mussard (MHNG).

Paratype: 1 ♂, same data as holotype (CBA).

Measurements: Length 2.54/2.63 mm, width 0.72 mm; ratio length/width of pronotum 1.1; ratio length/width of elytra 1.95.

Colour: Head, pronotum, ventral surface, and elytra brown. Mouthparts, antennae, legs yellowish-brown.

Head: A quarter smaller than pronotum. Surface dull. Clypeus, supraantennal plates finely but distinctly margined. Clypeus elongated, slightly bisinuate anteriorly, bisetose, separated from wings by broad indistinct notches, wings slightly projecting, devided from supraantennal plates by distinct notches; supraantennal plates convex, with keel-like longitudinal elongation posteriorly; clypeus with conspicuous hexagonal carina, hexagon opened anteriorly, posteriorly separated from frons by a flat transverse furrow. Clypeus and frons devided from supraantennal plates and eyes by deep longitudinal furrows. Furrows diverging posteriorly, with 2 supraorbital setae each. Sharp carina between furrow and frons at each side starting at mid-eye level, ending at neck constriction. Frons convex, with rounded carinae somewhat irregularly situated. Neck with distinct transverse carina and constriction. Eyes reduced, small but distinctly convex and protruding. Genae visible from above, rounding eyes in posterior quarter. Labrum convex, 7-setose. Mandibles elongate, slender, sharp, right one with tooth basally. Apical maxillary palpomere conspicuously securiforme, hollowed out dorsally, 2nd segment conspicuously tumid. Apical labial palpomere bottle-like, 2nd segment bisetose (Fig. 3). Antennae reaching up to basal constriction

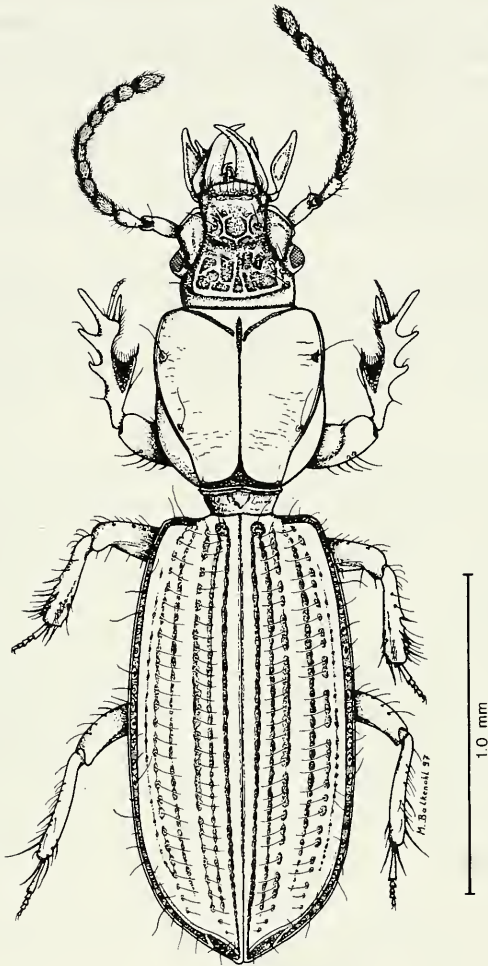


FIG. 1

*Leleuporella sexangulata* sp. n., holotype, habitus ♂.

of pronotum; pedicellus attached excentrically to scapus, scapus constricted apically, with one seta dorsoapically; segment 5 to 10 elongate (L/W 1.25).

Pronotum: Lateral view: anterior half explanate, moderately convex in posterior part, more convex to basal constriction; frontal view; moderately and regularly convex. Longer than wide, parallel at middle. Anterior margin slightly concave. Reflexed lateral border complete, extending over posterior setigerous puncture, extended to basal constriction as submarginal furrow and obtuse vault, bisinuate

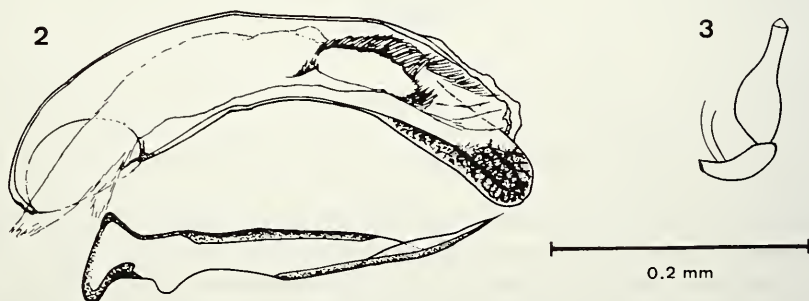
posteriorly. Two lateral setigerous punctures somewhat removed from marginal channel. Proepisternum tumid laterally, distinctly visible from above and forming outline of pronotum. Anterior angles acute, steeply bend ventrally and not visible from above, posterior ones missing. Anterior transverse line deep. Entire median line conspicuously sharp, not reaching anterior margin, surpassing anterior transverse line without joining, deeper anteriorly and posteriorly, adjoining basal constriction. Surface indistinctly and irregularly reticulated but shiny. No basal fovea. Basal constriction broad, deep. Ring-like flange elongated, concavely truncate at pedunculus, acute in lateral view.

Elytron: Explanate on disc. Elongate, side nearly straight at middle. Base truncate rectangularly. Marginal channel moderately broad, with uninterrupted series of setigerous punctures arising from small tubercles; reflexed margin smooth, distinct from humerus to apex, fine at base, fold-like carina at apex, crossing marginal channel. Humerus obtuse angled, no humeral tooth. Basal tubercle with setigerous puncture situated at declivity of 2nd interval. Stria 1 - 3 free at base. Stria 1 conspicuously deep, 2 to 4 moderately deep, all punctate-striate, 5 and 6 developed as rows of partly connected punctures, 6 shortened basally. Intervals moderately convex, 4th broader as others, 7th forming carina apically. Interval 3 and 5 with series of 25 to 30 setigerous punctures, situated regularly at outer stria; setae long, shiny, all bent ctenidiiforme mesially.

Wings: Reduced, length two fifth of elytron, width one third of elytron.

Lower surface: Proepisternum with distinct transverse wrinkles, submarginal furrow distinct at anterior angles, prosternum compressed between coxal cavities. Sternites with pair of paramedian ambulatory setae; terminal sternite shiny, without reticulation, 2 apical setae on each site widely separated. Ventral strigae distinct.

Legs: Anterior tibia with three lateral preapical denticles of increasing length towards apex, apical spine long, curved ventrally and slightly laterally. Mesotibia with fine tubercles. First tarsal segment conspicuously long at all legs.



FIGS 2, 3

*Leleuporella sexangulata* sp. n. 2. aedeagus and paramere, dorsal view; 3. labial palp.

Adeagus (Fig. 2): Median lobe regularly arcuate at middle, apex spatulate. Endophallus with group of few fine teeth basally, apical cup covered with long bristles. Dorsal paramere slender, fine at apex, ventral one rudimentary, both asetose.

Habitat: The specimens were sifted from vegetational debris.

## DISCUSSION

The key in BALKENOHL 1996 leads to *Trilophus* Andrewes/*Trilophidius* Jeannel. In contrast to these genera, *Leleuporella* possesses the following characters: The 3rd and 5th intervals of the elytra exhibit series of over 20 conspicuously regular setigerous punctures all adjoining the outer striae. The setae are long, shiny, and are all bent distinctly towards the suture so that this gives the structure a comb-like appearance. In addition, the apical segments of the maxillary and labial palps exhibit the form of a bottle, and the apical part of the aedeagus is spatulate like the apex of *Dyschirius* species.

Among some groups of small-sized Clivinini, the proepisterna are conspicuously swollen postero-laterally. Because of this tumidity the line representing the reflexed marginal border in other Clivinini is located on the surface of the pronotum without forming hind angles or teeth and the proepisterna are clearly visible from above. In addition, the submarginal furrows bordering the proepisterna on the lower surface of the pronotum are visible only in the anterior part. In the genus *Syleter* Andrewes this character is present only in *S. andrewesi* Basilewsky from Africa and is developed inconspicuously in some species of *Oxydrepanus* Putzeys from America, and *Afroreicheia* Jeannel (Ethiopia) also show transitions. The character is well developed in *Psilidius* Jeannel (Ethiopia), *Trilophus* Andrewes (Orientalis) and *Trilophidius* Jeannel (Ethiopia and Orientalis). It is most conspicuously developed in *Leleuporella*.

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